Day 1 with Office 2007

April 2007

Volume 20 Number 04

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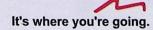




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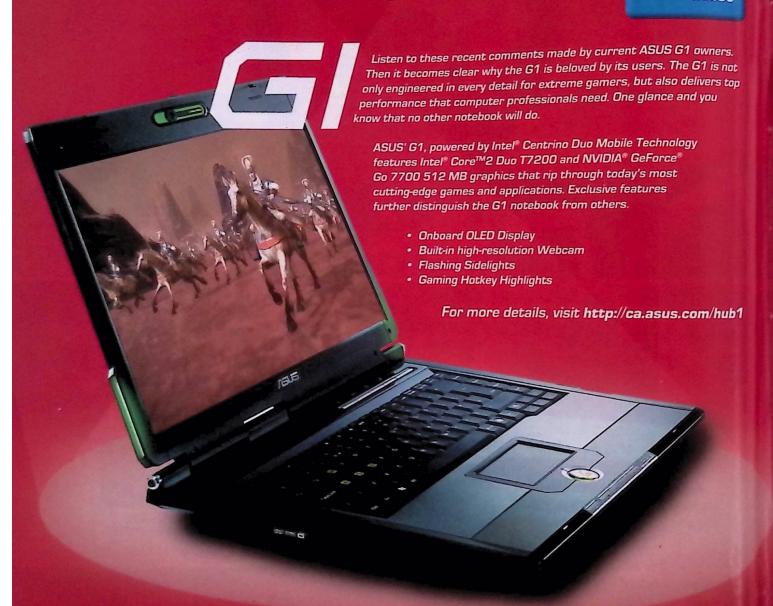




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Editorial

End of the mechanical hard drive



developed in the midhard drive.

The hard drive is the power consumption. only major component in a computer that's still

mechanical. It is also one of the two main points of failure for notebook computers (the other is the motherboard). A couple of years ago, I became an unhappy statistic by owning a notebook that suffered both failures, although not at the same time. The toasted motherboard meant I was without my machine for 72 hours but when I got it back, my computing environment was exactly as it was before.

I was on vacaction when the hard drive crapped out. The service depot ordered in a new drive, installed it and re-installed the factory software image in 48 hours. But of course my beloved TP2 was never the same. In the driveectomy, the patient survived but every bit of data died.

On various occasions, I've asked notebook makers why someone couldn't make a solid state drive using flash memory, and the answer has always been, "they're out cameras. The CompactFlash format still rules the high there but waaay too expensive for mortals - maybe some time in the future." Well, the future has arrived.

In mid-March Sandisk announced a 2.5-inch solid state incorporate SD slots in higher-end gear. notebook drive. At this point, the Sandisk's SSD is still too expensive (bulk pricing is US\$350 each) and too small around a 2.5-inch or 1.8-inch drive, the smaller drive will (32 gigabytes) to pose an immediate threat to mechanical drives for the mainstream. But around the same time, San Jose Calif.-based Super Talent Technology introduced a 2.5-inch 64 GB SSD (as well as a 128 GB space needed for mass storage means more space for 3.5-inch drive), although didn't give pricing.

If we apply a little Moore's Law math, it's not hard to Enjoy the issue, imagine that some time sooner than later, solid state David Tanaka, Editor In-Chief

drives will better mechanical drives in both capacity and I find it ironic that we're price. And once that happens, the mechanical hard drive relying on a technology will go the way of the floopy drive.

There are a number of advantages to solid state drives. 1950s for what's most. One is greater reliability. Sandisk estimates a mean time precious to us in these between failure of two million hours, six times better digital times: our data, I'm than a mechanical drive. Other benefits include deadtalking about the venerable silent operation because there are no mechanical actions to generate noise, cooler operation and lower

> Sandisk also says in its testing a notebook computer booted Windows Vista from its solid state drive in 30 seconds, compared to 48 seconds from a mechanical drive. The net is that you won't pay a performance penalty to go solid state.

> Solid state drives aren't a new thing. For extreme conditions like military applications, they've been a viable if expensive option. The fact that Sandisk and Super Talent have packaged SSDs to be the same dimensions as a notebook hard drive is not co-incidental. Sandisk characterizes its product as a "drop-in replacement" for a mechanical drive, so we know where that product's

> Both companies also make 1.8-inch SSDs and this smaller drive may have longer legs because another characteristic of digital is ever more capacity in ever smaller packaging. We're seeing this in memory cards for end, but the much smaller SDHC card is now matching it in capacity and camera makers are starting to

> If a notebook maker has a choice between designing win out as long as other performance factors are comparable. Volume is always the limiting factor with notebooks (and most other portable products), so less something else that's useful, like the battery.

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The teensy world of close-up photography

The magic of making small look big

Most point and shoot digital cameras have a close-up setting (almost universally indicated by the flower icon). This lets you get up close and personal with your subject, revealing details that you normally don't see. And that's one of the appealing things about this type of shooting. You can create fresh and novel images from even the most ordinary objects.

There are a few technical considerations you need to keep in mind when you shoot close-ups. At high magnifications, depth of field is extremely shallow. For example, if you focus into the head of a flower, you'll likely find that you can either put the top part or the bottom part into sharp focus, but not the entire blossom. The way to increase depth of field is to use a smaller aperture. Since small apertures let in less light, you'll need to compensate by either using a slower shutter speed or increasing the light.

An exposure can be several seconds long, which of course means you'll need to use a tripod. Better tripods allow you to spread out the legs nearly flat, so the tripod head is just inches from the ground – useful if your subject is a wildflower you want to capture in its natural setting. Some tripods also let you invert the post that holds the camera, or mount it horizontally, giving you more options for positioning the camera close to your subject.

Having your camera on a tripod will help keep the camera rock solid during a long exposure, but it won't help if a breeze comes along to move your subject. And at high magnification, even the slightest subject movement will be magnified. That's why an electronic flash is sometimes a better option. The duration of an electronic flash burst is very short: 1/1,000 sec is common and some will give a burst that's 1/10,000 sec or less. This sudden

blast of very bright light is enough to freeze all motion. For some subjects like moving insects, a flash unit is essential.

Using a flash presents its own set of challenges, however. When you are in close-up mode, you may find the camera is very close to the subject - some cameras will focus on an object that's just a few millimetres from the lens. With the lens barrel almost touching the subject, placing the flash so that it effectively lights the subject without creating a shadow from the lens may require some experimentation. Likewise, with a flash being very close to the subject, overexposure or hot spots and glare are other issues to deal with.

If you have a single lens reflex with an interchangeable lens mount, you can buy a special macro lens. The standard "kit" lens that is often included with SLRs these days is an adequate performer, but a true macro lens will deliver a magnification of 1:1, or life-size

image capture. Macro lenses come in various focal lengths, and one of the benefits of getting a longer (telephoto) model is that it allows you to keep the camera further away from your subject. This gives you more latitude in placing your lighting.

The ring flash is popular with close-up photographers. This is a unit that has a circular flash tube that encircles the lens barrel. Since the light comes from all directions, the tiny subject is bathed in light, with no harsh shadows. However, flash rings tend to be quite expensive, and I find using a single flash on one side of the subject with a white or silver reflector on the opposite side also does a nice job of balancing the lighting and reducing hard shadows. The pop-up, on-camera flash might work in some situations, but an auxiliary flash mounted off the camera is much more versatile.

By David Tanaka

Macro ain't what it used to be

Strictly defined, a macro lens will allow life-size or 1:1 magnification. Today the camera world is littered with references to "macro" even though the performance doesn't come close to that purist definition of life-size capture. The macro mode for point and shoot cameras typically deliver no better than one-quarter life size, or 1:4 magnification. Likewise the "macro zoom" lenses that most manufacturers sell for SLRs offer similar magnification, although some can get to 1-2 or half life size. This is pretty good magnification, but if you want a true macro lens, look for that 1:1 reference in the spec sheet.







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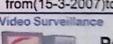


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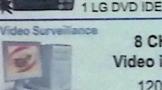
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Sounds Important

Canadians Connect with New Soundtrack Tools

Novice producers often treat the audio track as an afterthought, but think about it for a minute: pictures without sound, once called silent movies, died a long time ago. Sound without pictures, often called radio, is still alive and well.

There's a reason it's called "audio sweetening" whenever additional audio elements are added to a video production. I like to think it is because sound in video is like spice in food. Needed, necessary, but potentially dangerous to overuse! Your audio spice rack can include music, narration, ambient audio, special sound effects and other aural accents.

The best videos rely on a dynamic soundtrack to underscore and reinforce visual and emotional impact. The downside is cost — or the threat of legal action if you do not pay those costs.

Copyright is a federal law that protects musicians by giving them exclusive rights to their works. In short, it is illegal to use the work without the permission of the copyright owner.

Buying a licence is one way to gain permission. A license gives you the legal right to include someone else's work as a part of your own. Compensation to the composer or the rights-holder (or an agent or company representing the rights-holder) can take different forms including per-use royalties, complete buy-outs, time-based subscription fees or one-time purchases.

A number of companies and independent musicians offer music under these various licensing terms. You can find a whack of freely-downloadable scores and effects online. They're handy, but not always top-notch -- as is often the case, the price can reflect the value.

There are also commercial retail products that contain music loops, discrete elements and individual instruments that you can use to create your own soundtracks; the purchase price is often the cost of permission, as well. Loop music is created when repetitive parts of a piece of music are made into single pieces that the editor/composer can elongate (repeat) for as long or short a period as he or she needs.

In short, lots of tools and techniques are available to spice up your audio. One example is Sonicfire Pro (SFP) 4, the latest music scoring product from SmartSound. More than simple music scoring, SFP4 uses something called mood mapping, a kind of intelligent editing wizard that let's you control the over-all impact and energy of the music samples and loops you have selected. For example, it will remove or mute independent instrument tracks, and allow you to remix the music as you see fit.

SmartSound's Quicktracks for Adobe Premiere software is now a free download for all users. The Windows-only software includes 10 royalty-free music scores that can be custom-fit for any video project.

If your moods lean to the edgy and rock-influenced, there's a new collection of drum and percussion loops created by drummer Joe Vitale for Sony Media. Vital Drums is a two-disc, highly specialized collection with royalty-free premium .way file loops.

And, Music 2 Hues - another leading supplier of production music and SFX – released a great new title, Adrenaline Crush, full of high-energy grooves and aggressive, metallic sounds.

More edgy, rock-oriented soundtrack material comes from Canadian rock guitarist Jon (Doe) Williams, and the company he's running with partner Joel Manninger, another established Canadian musician and composer.

Copyfreetrax.com (www.copyfreetrax.com) sells a number of a royalty free

tracks that can be used in your personal or small scale productions as many times as you wish (up to 5000 units).

A number of licenced music and royalty-free track sources are now focused on podcasts, interactive multimedia, videogames and online entertainment as much as movies, videos and DVDs.

For example, ring tones, SFX, multimedia FX, podcast soundtracks and production music are available from another Canadian site, www.soundideas.com. With a comprehensive on-site search tool, this site offers royalty-free and customized content.

Likewise, the U.S.-based www.uniquetracks.com website is set up to license music in a simple, fast and straightforward way, downloading either MP3 or way files that can be legally used in podcasts and other media content.

Aimed at multimedia developers and Flash designers, the new Flash Music Loop CDs from www.beatsuite.com contain a massive array of flash music loops and flash sounds for the discerning digital media designer. What's more, previews can be downloaded straight to your desktop before purchase.

Now, while not an actual source of music or soundtrack elements, a new publication from another well-known Canadian musician should be of interest to you if you are adding audio to any media production.

Long a favourite of mine, Paul Hoffert is well-established on the Canadian music scene for any number of reasons. As the co-founder and drummer for the award-winning band Lighthouse, he helped forge a new musical style and bring international credibility to this country. And, as a new media technologist, he's been at the forefront of any number of leading edge technology and social networking experiments (such as the groundbreaking broadband in Newmarket project initiated a few years back).

With Music for New Media (Berklee Press, 2007) he is sharing his remarkable insight into composition and scoring for videogames, web content and interactive media presentations.

So, in this case, the print medium supports the aural content, which underscores the emotional impact of a visual medium. When diverse media elements work together like this, that's really sweet...

By Lee Rickwood





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Battle of the mobile music services

Your cellphone carrier wants you to leave your iPod at home.

Instead of lugging around both a cellphone and MP3 player, Canada's major cellular carriers — Bell Mobility, Telus and Rogers Wireless — have a simpler solution. All three have launched digital music services so you can wirelessly download songs directly to the handset. All three carriers also give you the option to download a second version of a song to your PC. This in addition to letting you transfer and play the favourites from your existing digital music library onto your phone's memory card.

But should you be buying into this convergence trend? Sure, it's convenient to carry only one device instead of having to wear a "bat belt" for all your

gadgets. Also, downloading music while on the go has its appeal. Most carriers also offer an all-you-can-eat subscription model to fill your phone's memory with songs for a monthly fee.

But there are still some limitations. Purchasing a song from your carrier might cost up to four times more than a song bought via other Canadian online stores, such as iTunes or PureTracks. Also, while some phones accept removable memory cards, none can match the storage capacity of the iPod (up to 20,000 songs). In addition, the quality of audio on cell phones is also not yet on par with dedicated portable media devices.

We set out to test-drive these mobile music services, and report on the experience, price and song selection, to see which one – if any – you should invest in. Here's what we found.



The basics: Currently, only the LG 8100, LG 8500 (Chocolate), Samsung a950 and Samsung a720 phones support Mobile Music (www.telusmobility.com/mobile music). Download to your cellphone and PC for \$1.99, plus a 50-cent download fee, per track (or just to your PC for \$1.29). Alternatively, you might opt for unlimited downloads for \$20 a month. Telus says more than 325,000 songs are available, from Sony BMG, Universal, EMI Music, Warner Music Group, and a few independents. Top sellers include Beyoncé's Irreplaceable, Justin Timberlake's My Love and Gwen Stefani's Wind It Up.

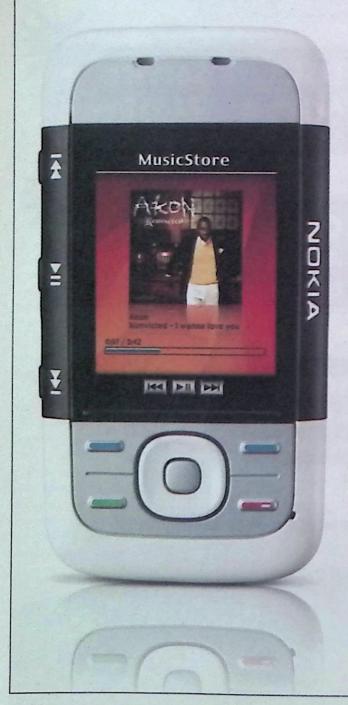
For \$169.95 (three-year contract), you could opt for the Sweet Jam bundle, which includes a Samsung 720 phone, one-GB MicroSD memory card, Plantronics Bluetooth stereo headset with carry case, USB card reader and a clear phone carry-case with swivel belt clip.

The experience: While it doesn't include a memory card (unless you pick up the "Sweet Jam" bundle), we loved the sleek Samsung a720 clamshell handset with dedicated music controls on its face. Browsing and buying music is as easy as pressing the Music button near the LCD screen, which launches the Telus Mobile Music application. Press one of the four main buttons to listen, shop, download songs or change settings, such as the options to shuffle tunes or select language preference. On the phone, songs are saved in AAC+ format (U2 and Green Day's The Saints Are Coming downloaded in just a few seconds via the high-speed EV-D0 network), while the PC version lets you download encrypted WMA (Windows Media Audio) files after logging into a password-protected website. Free software, such as Windows Media Player, can play these downloaded WMAs, but you can't copy them to a phone's memory card or MP3 player.

Bell Music Store

The basics: At www.bell.ca, customers can also download songs wirelessly from Bell Mobility's Full Track Music to their handset, so long as they are using the Samsung a920, Samsung m500, the LG 550 (Fusic), the Sanyo 7500 or Samsung 900. Pricing is a bit complicated — and expensive — but if you subscribe to the Unlimited Mobile Browser service (\$7 a month) then it costs \$3 per track to download a song. If you don't subscribe to this service, though, one attempted download warned of an incredible \$51.20 (cough!) in "data transport charges." The Bell music store claims the highest number of songs of all the services, however, totalling more than 700,000 and covering all major genres.

The experience: Similar to Telus, Bell Mobility allows users of the supported



phones to simply press the Music icon from the main menu to launch the store — or, with the Samsung a920 reviewed for this column, hold down the Play button on the outside of the flip phone. You can search for songs, preview (30 seconds) and shop to download to the handset, which takes about 25 seconds when in an EV-DO coverage area. And while I could download new music while travelling in the U.S. via the Telus and Rogers music stores, Bell Mobility did not allow it due to what a Bell spokesperson called "a combination of digital rights issues and the high data costs associated with roaming in the U.S."

Songs are stored on removable TransFlash memory cards at about 1MB per song, therefore you can fit about 30 tunes on the bundled 32MB card (read: not enough memory) or you can purchase one with greater capacity. You can also log into the Bell Mobility website to download and listen to Full Track Music songs in WMA format on your PC.

Rogers MusicStore

The basics: The Rogers MusicStore (www.rogers.com/musicstore) setup is a bit different than Bell and Telus's. For one, customers can choose from one of four plans to suit their needs and budget: unlimited mobile and PC downloads for \$20 a month; unlimited PC and mobile downloads for \$15 a month plus a 50-cent fee for each mobile download; unlimited PC downloads for \$10 a month (but you can transfer to a phone and other MP3 player); or a pay-per-track option for \$1.25 a song for mobile phones (plus \$1 download fee) or \$1.99 for the same song downloaded to both a mobile phone and PC, plus \$1 fee.

Another distinction: Rogers is the only one to offer a free, downloadable

desktop client (think iTunes) that lets you search, purchase and listen music, plus it lets you create playlists, transfer songs to an MP3 player burn CDs. Eight handsets support direct-to-phone downloads, including the Nokia 5300, Motorola V3 Razr and Sony Ericsson K790.

The experience: The Nokia 5300 "slider" phone may be chunky compared the Razr but we liked the rubberized music buttons on the side of the un plus it ships with a 1GB memory card to store about 1000 tunes (depending on the quality). Downloaded songs are saved in AAC+ format to the intermemory or removable memory (regrettably, you must remove the bacover of the cellphone, which is tricky, to access the memory card).

On the PC, independent songs are saved in MP3 format or as encrypt WMA files for major label songs.

Rogers estimates it has a "few hundred thousand" songs from four malabels: Sony BMG, Universal, Warner and EMI. Download speeds, mobinusic software interface and quality of the songs were all comparable Telus and Bell, but we liked the attractive and intuitive MusicStore softwarent on the PC. Also, the many plans provided for per-track or subscription downloads may be a bit confusing, but it's nice to have options.

By Marc Saltzmi



Burn baby burn

A primer on creating your own custom compilations CDs

When you drop a favourite CD into your audio player, chances are that you like most of the songs but not all of them. Ripping and then burning your own custom CDs lets you create the CDs you want to hear with the songs you like and without those you don't.

For those of you that spent the last decade on another planet, the terms ripping and burning describe the process of copying the tracks from an audio CD onto your computer (ripping), and then copying them back onto a new blank CD (burning). There are plenty of tools you can use to rip and burn, and one of these is probably already on your Windows computer in the form of Windows Media Player. The latest is version 11. If you're using Windows XP, you can download it from this site:

www.microsoft.com/windows/windowsmedia/player/11/default.aspx.

Using Windows Media Player

To create your own CD, click the Rip button and place the first of your music CDs in the drive. Windows Media Player will automatically download the track information from the Internet and you will see details of the tracks on the CD appear on the screen. This saves you having to type them in yourself.

The ripping process will start immediately but, if desired, you can click the Stop Rip button to stop the ripping. When you do this, you can deselect any files you don't want to rip leaving selected only those you do want. To select the format to use for the ripped music, open the Rip, Format dialog and here you can choose from WMA, MP3 or WAV. Click Start Rip to start the ripping process again. Continue and rip all the tracks you want to burn to your own CD.

When you've ripped all the tracks, you're ready to burn your CD. To do this, click the Burn button and place a blank recordable CD in your drive. Drag and drop the tracks you have ripped from the Library onto the Burn list, which is on the far right of the program window. You can add tracks from anywhere on your computer. The indicator shows you how much room is left on your disk, so if you add too many tracks, you can either choose to burn multiple disks or remove some of the selected tracks until the overall size is within the limit of a single CD.





If desired, you can reorder the tracks in the burning list to arrange them into your desired playing order. When you're ready, click the Start Burn button to burn the CD. If you'd like to play this same series of tracks on your computer at a later date, or if you want to burn it to another CD, save it as a

playlist so you can use it again without having to recreate it.

Rip and burn in Nero Express

One of the other popular programs for ripping tracks to burn to a CD is Nero Express from Nero. When you launch the program choose Music, Audio CD to launch the My Audio CD dialog. Take the first CD that has tracks that you want to copy to a new CD and determine which track numbers you want to copy. Place that CD into your CD drive and click Add. Nero Express will read the CD and a select files and folders dialog will open. From here you can select the tracks that you have identified that you want to add to the disk you will be burning.

Click the Access Internet Database button and Nero Express will connect to the Internet to locate the track data for the CD so that it can identify the name of the songs you've selected and the artist's name too. Once the track details appear in this dialog, click the Use Selected CD button and the details that have been downloaded from the web will be used as the details to identify these tracks on the CD you're about to create.

Wait as the tracks are ripped from the CD. Once the tracks have been added, you can repeat the process to rip songs from another CD. Once the list is filled with the tracks you plan to burn, insert a new blank CD into your CD drive and click the Next button. Type a title for your CD and add the artist details, if desired. You can also select the writing speed for the disk from the dropdown list and select if you want to create more than one disk. When you are done, click the Burn button to burn the new disk. It's sensible to avoid using other programs while the burning process takes place and allow the program all the computing resources it needs.

By Helen Bradley



Étes-vous du genre branché? ou bien branché?

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Digital Audio Recorders

Whether you're setting up for a garage band rehearsal, running a corporate board meeting, or monitoring lectures and spoken-word presentations, new devices for recording digital audio can help you "preserve the moment" and distribute it worldwide as a podcast, Web stream or CD.

Units like those from Wolverine (described in an earlier issue of HUB:DL), Edirol, M-Audio, Samson, Sony and others are well-suited for pro and semipro applications; others are more suited for the broad consumer market (which can include business or personal uses).

Edirol, for example, is a long-established company offering a wide range of professional media products, including a series of digital audio recorders. Its newest model, the R-09 (approx. \$360), is a smaller and more compact version of earlier R-1 and R-4 models, but with just about as many features and functions built in.

This battery-powered portable recorder has a built-in stereo mic, and records audio to SD cards in linear PCM, MP3, or uncompressed formats. It features both mic and line inputs, and has gain and volume controls to manage the incoming signals. A USB 2 connection allows transfer of recorded files to a PC, for further manipulation, editing or distribution. Two AA alkaline batteries will drive the unit for about four hours.

The built-in stereo mics are handy for recording on the run, but can cause some problems in certain situations. The physical separation of the mics on the unit means that recording someone (speaking or singing) while their head moves from side to side can cause sound levels to vary. Using the automatic gain can boost lower sound levels for better recording, but it can

also introduce unwanted ambient noise as it searches for a sound to boost (such as during a pause in a spoken presentation or speech.)

A single LED light displays record levels; good recordings should not let the indicator light up from sounds that are too loud.

Using the Microtrack 24/96 recorder (approx. \$430) from M-Audio poses a somewhat similar challenge, in terms of accurate monitoring of recording levels. Also a portable unit (with internal rechargeable battery pack and optional AC adapter), the Microtrack uses a backlit LCD display with an unnumbered scale and cursor-type indicators. LEDs will light up at peak levels, but peaking in a digital recording is not a good idea - it generally means the incoming sound has been clipped or flattened at the high end in some way (unlike analog audio recording, in which peaks are acceptable, and are not clipped digitally). Headphone or headset monitoring is always

The Microtrack offers both analog (1/4-inch balanced line inputs; 1/8-inch mini-plug mic input) as well as S/PDIF digital connections. Storage is on CompactFlash or microdrive devices. Early Microtracks did have some glitches with the on-board software and menu navigation system, but updates are available online, and easily loaded via USB connection (the same ones used to get recorded audio onto a PC or Mac).

Like most such units, the Samson Zoom H4 (approx. \$410) records 24bit/96 kHz digital audio as well as in MP3 format with bitrates up to 320kbps. It, too, has two condenser microphones configured in an XY pattern for stereo recording, and offers XLR-1/4-inch high impedance input jacks with





phantom power. The H4 has more onboard studio effects (such as compression, limiting and mic modeling) than some comparable units, as well as a unique built-in guitar amp modeler.

Like others, it has a 1/8-inch headphone jack for confidence monitoring.

The H4 records on SD media, and can capture up to 34 hours depending on selected modes.

Portable recorders with WAV capability offer professional quality (24 bit/48 kHz, and/or 16 bit 44.1 kHz) sound recordings, but the downside is file size. A five minute WAV file, at 24 bit 48 kHz will take up some 100 megabytes (MB). The compressed MP3 format, on the other hand, offers good sound at much smaller file sizes (five minutes of MP3, at 128 Kbps, 44.1 kHz uses just 5 MB.

Distinct from the pro or semi-pro digital audio recorders just discussed are literally hundreds of recording devices for less demanding applications, such as dictation or surveillance. Usually capable, they are small (some as tiny as two inches in length), but that limits record capacities (up to two hours max with some units), and what's often standard with higher priced units is usually optional (like a mic and a cable). Quite often, the recording format is a proprietary, or a scaled back version of a recognized format, so that manipulation of recorded sounds can be a real challenge (third-party conversion software, if available, is usually required).

Distinct, too, from portable recording devices are new all-in-one, Ut connected and recorder-equipped microphones.

The SoundTech LightSnake is a microphone-to-PC cable with embedd analog-to-digital converter. Just plug your mic into the cable, and the cabinto your desktop or laptop, and you have a digital audio recording stuc at hand.

sE Electronics is now shipping two such professional studio quality U microphones with good quality (record path 16 bit 48K, output 24 bit 48L capabilities, reliable ultra-low latency headphone monitoring, 10dB paths base cut and other effects, as well as 48v phantom power.

Samson, in addition to its digital audio devices, offers microphones w built-in analog-to-digital conversion and USB for direct input to a PC. Its 0 is a handheld dynamic mic; the CO1U is a simple studio condenser mic.

Microphones like Samson's COU1 and RODE's USB microphone (call Podcaster), are designed for that one particular application. More demand uses, and wider recording capabilities, are found in other pro-products.

Zaxcom, for example, has its new TRX700, a plug-on transmitter/recome designed for broadcast news gathering and TV production. It uses removable miniSD card for up to 12 hours of time code-referenced au (very handy for editing and post-production).

There's a new stereo adaptor, as well, providing balanced stereo audio ing that eliminates ground loop problems for pristine quality and the utmost record confidence.

Many users need more than simple conversion, connectivity and conti when evaluating a digital audio recording device, think about you requirements carefully.

By Lee Rickwo

Is it legal?

If you're looking for a digital audio recording device of some kind, one of the fire questions to ask yourself is: "Is this recording legal?"

Now, I'm not a lawyer, but I am a media producer, and from experience I can sa that the copyright, digital rights management [DRM] and legal issue surrounding content recording and distribution are potentially more importan more complicated and more costly than much of the equipment used to make

For example, in Canada, Section 184 of the Criminal Code says, in effect, the improper interception of communication can lead to a five year prison sentence it defines "interception" as recording by means of electro-mechanical or other device — devices like the ones described in the accompanying article. As somewhat welcome fudge factor, the Code also uses words like "wilfully" an "private" without definition, so there is some wiggle-room for the legal eagles to exploit.



Five hot iPod docking stations

The traditional home stereo is far from dead, but considering that many of us in our increasingly mobile culture are toting around an entire music collection in our pockets, shouldn't we be able to play these tunes anywhere - without having to wear headphones?

When was the last time you saw a receiver, loudspeakers and 500 CDs in a bedroom? But if you add up how much time you spend here - relaxing before bed, getting ready for work, or with the case of university dorm rooms, living in this tight space - it makes sense to toss a compact speaker system designed for the almighty iPod or another MP3 player.

There's no shortage of such devices these days, but the following are five of my favourites -- and a bonus item for those looking for a portable laser light show.

High-tech lullabies

Consider it a perfect bedside companion for iPod lovers. The TEAC SR-L200 Hi-Fi Table Radio (\$129.99; www.teac.com) lets you dock your player in a snug cradle on top of the unit that not only recharges your iPod's battery but iPod speaker system. Plug it into an electrical socket or pop in six AA also lets you listen to music, podcasts and audio books through its crispsounding stereo speakers. Or you can set the alarm to play your favourite song. Available in white or black, this clock radio ships with connectors to fit all iPod models and also features an AM/FM tuner with station presets, snooze bar and backlit LCD screen. Also included is a small remote and optional auxiliary input (and cable) to connect a non-iPod based MP3 player.

Power to go



batteries for up to 10 hours of audio, and then use the wireless remote to crank it up to 80 watts of total power. Non-iPod MP3 players can also be used with the auxiliary input jack (though it won't recharge the device). Have a TV nearby? Use the composite output option to watch your iPod's video - be it camcorder footage, TV shows, movies, music videos or podcasts - on a big screen instead of the iPod's 2.5-inch display.

Conversation piece

Whether it's for your home, office, cottage or beach, the Logitech Perfect for kitchen countertops, family room tables or even bedroom AudioStation Express (\$99.99; www.logitech.com) is a sleek and portable dressers, the JBL Radial (\$349.99; www.jbl.com) is a unique-looking circular





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iPod docking station and 30-watt speaker system that sounds a good as it looks. Available in bone white or piano black, this stylish portable accessory fits all iPod types with swappable adaptors, supports other MP3 players and includes a video-out option to view photos or videos on a nearby television. The wireless remote uses RF (radio frequency) instead of IR (infrared), therefore you can control your tunes even from another room (up to 20 feet).





Bose SoundDock

This one's my pick. They might not be new, but they're still one of the best-sounding docking station speakers you could buy for your beloved iPod. Turn any room into a concert hall with Bose SoundDock Digital Music System (\$399.99; www.bose.com), which delivers powerful but clean, full-frequency performance out of its shielded speakers. As with other Bose products, it can be hard to pinpoint where the audio is actually coming from as it offers a spatial surround sound effect. Slip in any iPod with a dock connector on the bottom, press a button on the wireless remote and manage your music as you go about your business. Available in black or white.



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Add some boom to your room

Music enthusiasts who spend time on the road may opt for this smart (and smart-looking) audio system from Altec Lansing. Similar to its stationary M602 product, the portable iM3 (\$179.95; www.alteclansing.com) looks like a teeny boom box and lets users insert their iPod, iPod nano or other MP3 player between two speakers (each housing 1-inch neodymium micro drivers) to fill the space with balanced sound. For iPod products, a wireless remote controls song navigation, power and volume, while the universal plug set offers adapters for various electrical outlets. No A/C plug in sight? No problem, the iM3 can run for roughly 24 hours on battery power.

Laserpod - And now for something completely different...

The '60s gave us the lava lamp, but it's all about laser light and LEDs in the '00s. Case in point — the Laserpod (US \$89.95; www.firebox.com) is a patented invention by UK light artist Chris Levine, whose work has lit up the band Massive Attack and high-profile fashion shows — though he might be



best known for a celebrated hologram portrait of the Queen of England. The Laserpod uses three electronic lasers and three blue and purple LEDs (light emitting diodes), all projected through a crystal to create a dazzling light show throughout a room fbest used in complete darkness]. Turn on the Laserpod when you've got Pink Floyd cranked on a MP3 player docking station and you've got yourself one killer kaleidoscopic laser light show.

By Marc Saltzman



MP3 players embrace Wi-Fi

First came the ability to carry around thousands of songs in your pocket. A few years later and we're also toting around photos, videos and games on the same device. The third major step in the evolution of portable media players, however, is wireless communication, both as a means to acquire new content, as well as a way to share it with friends.

The following is a brief look at four such devices, available now or just around the corner.

Sansa Connect



SanDisk's Sansa Connect (\$295; www.sandisk.com) lets mobile music lovers in a wireless hotspot access an online buddy list to hear what friends are listening to, with no song limit or time restrictions, and then tag songs to purchase and download to listen to when offline, such as in a subway. Along with MP3 and photo playback, the Sansa Connect also lets you stream Internet radio stations via Wi-Fi - and even view album artwork on its 2.2-inch screen in real time. This 4GB Flash player, which includes an option to expand the memory via MicroSD cards, also has a built-in speaker so you can listen to tunes without earbuds. It's

gutsy going up against the almighty iPod, especially in the wake of the iPhone this summer, but at least this gadget

commitment to a cell carrier.

is ultra-portable and doesn't require a

Apple iPhone

Poised to be one of the hottest gadgets of 2007, the Apple iPhone (www.ipod.ca) expected to be carried by Rogers Wireless sometime this summer - is basically three products in one: a widescreen iPod with a 3.5-inch touch-screen display; a quad-band GSM smartphone; and a WiFi-enabled device capable of text-messaging, VoIP calls, email, Web browsing and interactive Google maps. The iPhone also offers Bluetooth connectivity for wireless headsets, a 2-Megapixel camera and a new music navigation feature called Album Flow that lets users browse their music library by flipping album artwork with their finger. It won't be cheap, however: in the U.S. (through Cingular) the iPhone will be US \$499 (4GB) or US \$599 (8GB), plus a twoyear carrier commitment.

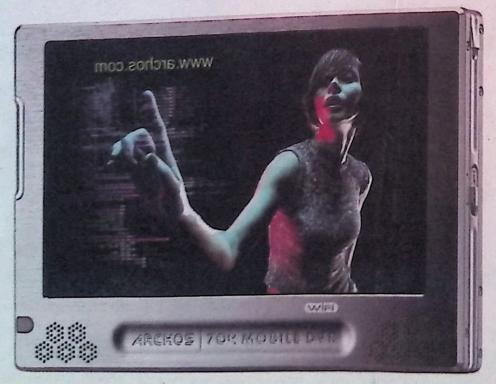
Microsoft Zune

Expected to be available sometime in 2007, the Microsoft Zune [www.zune.net] is Redmond's answer to the almighty iPod, but with an emphasis on the "community" side of music enjoyment. That is, this 30GB hard-drive based media player has built-in wireless technology that lets you beam songs to other Zune users in the area, which they can then listen to up to three times over three days; after that, they'll have the option to purchase it from the Zune Marketplace store. It's no wonder that the Zune ads announce "Welcome to the Social." Shipping in white with clear finish, black with blue finish or brown with green finish, the Zune also offers a 3.0-inch screen to view photos, videos and album artwork, viewable in portrait or landscape modes, and includes a built-in FM tuner. No price or Canadian launch date has been set.

Archos 704 Wi-Fi

Similar to its "604" predecessor, the Archos 704 Wi-Fi (\$649.99; www.archos.com) is a wireless 80GB portable media player that — as you can guess by its name — includes built-in Wi-Fi to wirelessly download MP3 files, stream radio stations from the Web or access all your PC-based media wherever you may be in your wireless network. The real kicker, however, is a humongous 7-inch (diagonal) touch-screen display, so when you walk around your house enjoying your music, photos or videos, you're almost carrying around a media tablet instead of a teeny MP3 player — and of course you can connect it to your HDTV for a big-screen experience. This high-end device also offers support for multiple media types, and with an optional DVR accessory (\$100), you can also record directly from your TV.

By Marc Saltzman



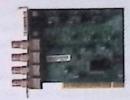


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When Audio Worlds Collide

Sometime—in the not so distant future, as you'll see—we'll all have some variation of a "smart" home. Somewhere in our bungalows and split-levels we'll have all the data and electronics we need to control the temperature, switch on the security system and the indoor/outdoor lighting, detect noxious gases, keep track of food expiration dates, automate kitchen appliances, manage most every device in a home theatre/home audio system, and likely handle a bunch of stuff that hasn't even been conceived yet.

How we operate a smart house is open to speculation. We may have touch/display screens or use voice commands or handheld controllers with high-resolution LCD screens. However, one thing is clear—very few of us will have enough spare change to purchase and install all the smart home ingredients for quite some time to come.

But that doesn't mean we can't get a taste of the technology today. Indeed, if you're nuts about your music, you've picked a hobby on the very forefront of the computer integration revolution. The goal? To move all that great digital music you've ripped from discs or downloaded from the Web out of your office and its crummy computer audio setup and into your glorious living room entertainment system.

As with any developing concepts, there are a number of ways to realize this goal. If you want to keep it cheap and wait for the technology to sort itself out, the most affordable idea is to simply burn a bunch of your tunes to a recordable CD and play them on an MP3-compatible disc player. But that's so old school. Burning is a hassle and discs hold only so many tunes. A better idea for many might be a flash drive. An inexpensive 2GB flash drive, for example, can store hundreds of high bitrate MP3s. Copying files to and removing files from a flash drive is easy, and as a bonus, you can also use the very same flash drive in one of the many USB-equipped car decks currently on the market.

Of course, you'll need something in your living room that'll read the drive. Tight-budget options include the Philips DVP5960, an upconverting DVD player with a simple, built-in USB reader on its front panel. Indeed, most major Canadian electronics retailers have at least one or two DVD players with basic, on-board flash drive readers. If online shopping is more your style, check out Oppo Digitals' DV-970HD, an upconverting USB-equipped DVD player that's getting rave reviews. But beware—not all drives are compatible with all devices.

But what if you don't need DVD capabilities or you want direct access to all the media files on your PC—not just the ones you can fit on a thumb drive? Now, that's where things get interesting.



Bridges and streams

Probably the least expensive way to "stream" media files direct from your PC is a product like the Sirocco Audio Bridge. Designed by BC's own Sondigo, the Sirocco interfaces with the PC either wirelessly or via an Ethernet cable, and acts essentially like an external sound card. The primary advantage of this "sound card" system over some of its similarly priced competition is that it more easily handles DRM-protected files—not a small thing for those who frequent today's biggest online media file vendors. The bad news is that users can't control their music remotely—they must return to the computer to make any adjustments to their playlist.

Stepping up to the two hundred mark gets you into remote-controllable streaming. D-Link, for one, has been in the streaming game for some time now, with wireless devices such as the MediaLounge DSM-320 and DSM-520. Both are low-slung and sleek, just like modern audio-video components, and both can be operated from the comfort of your La-Z-Boy. But neither offer a built-in display (you need to switch on your TV for that), and there have been reports of uneven performance.

A potentially better bet at the same price point is the near-ubiquitous Roku SoundBridge. The tube-shaped SoundBridge offers a built-in display, a simple setup, Internet Radio support, and easy operation. But plunk down a few more bucks and you're into Squeezebox territory. The third iteration of the original model, Slim Devices' Squeezebox 3 is super stylish, Internet radio-capable, and fitted with a big, legible display. It's laden with features and lauded for its smooth streaming and open-source software that permits user customizations.

Upping the digital media player ante is the soon-to-be-released Netgear EVA800. Physically, it resembles the D-Link devices above, but its feature list is far more comprehensive. The unit supports a ton of codecs, streams some DRM content, handles high-definition playback of Windows Media Video 9 or MPEG-4 file formats up to today's 1080p ceiling, and features two USB ports for portable storage devices and iPods. Expect to pay nearly \$400 when it hits the market this spring.

Big buck solutions

Those who require whole-house solutions may want to look at fully expandable systems such as the latest from Sonos. Getting rave user reviews, the Sonos ZonePlayer ZP80 handles most every type of file aside from certain DRM-encrypted content and does Internet radio too. It sets up its own proprietary network that avoids interference from external devices, thus allowing you to confidently plunk ZonePlayers all over the house. But the biggest lure may be its handheld remote, featuring a full colour, high-resolution, scrollable LCD screen that lets you see everything—including album art—up close and personal. A couple of ZonePlayers will set you back a cool grand.

If you're going to spend that kind of money, and in particular if you need to upgrade your ancient AV receiver too, you may want to investigate a shiny new streaming-capable receiver. Respected manufacturers such as Denon, Yamaha, and Pioneer all offer receivers capable of pulling radio from the Internet and music from your hard drive. The Pioneer VSX-84TXSi, for instance, has a USB port that allows you to connect your PC directly to the receiver and bypass the sound card entirely. Do your research beforehand though, because some models are already a little long in the tooth and won't work well into the future. One streaming-capable receiver that seems to

have all the bases covered is the Onkyo TX-NR1000—though crazily pricey, it handles everything but the proverbial kitchen sink and features upgradeable (and sometimes replaceable) modules.

But if you're going to go that extent, why not simply put a PC in your living room? You'll likely want to skip older "media center" PCs because they look like PCs (i.e. clunky), they're controlled like PCs (i.e. clumsily), and they feature middle-of-the-road sound cards and electronics that just won't do justice to your audio.

Sony's just-released VAIO XL3 Digital Living System is one of the better options. The XL3 looks like a traditional high-end A/V component, but with all the futuristic capabilities of a PC. It features a built-in Blu-ray player, memory card slot, dual USB ports, and, of course, integrated audio-video streaming. If Sony's managed to eliminate the vibrations and other electronic interference that typically hamper PC audio, and if the internal sound card is up to snuff (those are big ifs), the XL3 could be a winner.

Sound purists might do better with the new Onkyo HDC 1.0, a product Onkyo says is a true "HD audio PC." Onkyo has refrained from juicing the HDC 1.0 with an internal power supply—thusly exorcising one of the main reasons behind inferior PC audio—but that means you'll need to power the unit with external power such as Onkyo's matching digital amp. The SE-90PCI sound card residing inside is a good one, but the non-Windows proprietary software may cause headaches. Moreover, you'll need to dump in the neighbourhood of \$2500 for both the PC and its amp.

Regardless of price, neither of these home entertainment PCs deals with the inherent problems of internally mounted sound converters. Audio engineers have long believed, and rightly so, that internal cards and their analog-to-digital converters are subject to the interference and noise put forth by other PC components such as hard drives, fans, network cards, and the like. Engineers deal with it by using sound cards with "breakout boxes," such as M-Audio's Delta series and Echo Audio's Layla and Gina models. Consumers, especially those who are sticklers about their sound or regularly record/capture audio to add to their music or videos, would be wise to explore this option.

I'll be your server today

Meanwhile, software giant Microsoft is finalizing work on a "whole home" project that's sure to impact fans of sound and video. With its just-announced Windows Home Server, Microsoft wants you to buy into the idea that networking is essential and easier than ever.

Rather than the typical peer-to-peer network that's found in most multiple-PC households today, Windows Home Server works hand-in-hand with hardware such as HP's just announced MediaSmart Server (essentially a sophisticated, central data storage bin with expandable hard drive space) to deliver a true server-client network. Benefits include automated, touchless backups of all the data in all the connected devices, worldwide access to the Windows Home Server via a personalized Windows Live Internet account, and quicker, "always-on" availability of files and information. Windows Home Server is not due until fall this year, but it may eventually alter the way we all do our computing and become a real boon to those who want to access their media from anywhere within their home.

Of course, Windows Home Server will need some way to communicate with all those devices. Though a wireless network involves the least amount of invasiveness, it certainly isn't the fastest way to move data, and it's subject to external interference. But do you really want to go to all the trouble of running a web of Ethernet cable throughout every nook and cranny? Networking veterans Linksys and Netgear say you don't

necessarily have to.

Both the Linksys PLK200 PowerLine AV Ethernet Adapter Kit and the Netgear Powerline HD Ethernet Adapter operate on the principle that Ethernet is passé. Instead, they use your existing electrical system as a network, plugging into your AC outlets and piggybacking along with the current, so to speak. The downside is that you'll still need to run a cable from each networked device to each powerline adaptor. The upside is that that's the only wiring you'll need to do.

Though powerline networking is nothing new, this new batch of powerline gear is faster and more reliable than previous iterations and thus a good alternative for those who need better throughput than a wireless network can provide. It's costly though, at \$200-plus for a set of two adapters, and it's not as fast as good old Ethernet.

By Gord Goble



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Video Calls with Skype

Helen Bradley explains how to make video telephone calls with your computer



Reliable and useable video mobile phone in the world using a combination of internet and regular phone service.

When you install Skype on your computer, you are able to make

telephone calls from the comfort of your own home are now a reality. All you need is a computer, broadband connection, microphone and webcam -- and a piece of software called Skype. Skype is an internet phone that connects you to other Skype users via the internet, but it can also connect you to almost any landline or

regardless of where they are in the world. Calls from your computer to a landline or mobile phone cost a few cents per minute - typically less than making a regular phone call. You can download the latest version of Skype (version 3.0 at the time of writing) from www.skype.com. There are versions available for Windows, Mac and Linux operating systems as well as for mobile devices. Once you have downloaded Skype, register for the service and get

phone calls across the internet. Calls to other Skype users are free

your Skype name which is the name that people use to call you. Check that your microphone is working with Skype by choosing Tools, Options and click the Sound Devices group. Click the Make a test call to Skype answering machine and you'll hear the test call message. When the beep sounds, speak a short message and wait as the message is played back to you. If you hear the message you left, then you can be reassured that your microphone works with Skype. You can also call this service anytime by dialling Echo 123.

Video is an optional component of Skype. To make video calls, you must have a webcam installed on your computer. Inside Skype, choose Tools, Options, Video and check the Enable Skype video checkbox. Select your webcam from the list and click the Test Webcam button to test if your webcam is working with Skype.

If required, click the Webcam Settings button to configure the webcam. The options here will be specific to your particular webcam. Back in the Video section of the Skype Options dialog, configure whether Skype video should start automatically when you are in a call or not. You can also select who you're prepared to receive video calls from. Once you have a webcam set up to work with Skype, anyone who calls you will see your webcam's feed on their Skype screen.

Before you can call someone, you'll need to add them to your contact list. Provided they are a Skype user, choose Contacts, Add a Contact and, in the Add a Skype Contact area, type either that person's Skype name, their full name or their email address and click Find. Skype will locate them in its records for you. Once someone is added to your Skype Contacts list, you can see when they are logged in and available to take calls. If you buy Skype out minutes (which you can do online), you can call people with landline and mobile phones but, of course, they won't be able to see your video. You can also create a conference call in Skype by inviting other people into the conversation. This feature works best with just three or four participants and you cannot share a video stream at the same time.

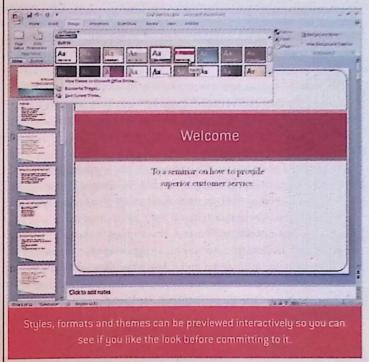
To call a contact, check they are online and click their name. Press the green call button to start the call and the red button to hang up when you are done. If you've purchased Skype credits, you will see your current available balance on the screen.

Skype automatically loads itself into your taskbar whenever you start up your computer. The green Skype indicator on the taskbar shows you it is running and others will see that you are online so they can call you. For this reason, leave your computer's speaker turned on so you will hear the call signal if someone rings. The Skype phone rings like any regular telephone and you can configure the ring tone using the Tools, Options, Sounds settings. If you frequently use Skype, consider buying a set of headphones with a noise cancelling microphone built in so that the sound quality is good.



Day One with Office 2007

Helen Bradley explains what to expect on your first day with the new Office 2007



The first thing that you will notice when you open any of the major applications in Microsoft Office 2007 is how big a change there is to the program interface. Microsoft Word, Excel, PowerPoint, Access and, to a lesser extent, Outlook have a completely new look that does away with all the menus and toolbars you're familiar with and replaces them with a brand new set of tools.

Across the top of the screen is the new Ribbon where most of your work will be done. The Ribbon has a series of tabs such as Excel's Home, Insert, Page Layout, Formulas, Data, Review and View tabs. Click a tab and an entire collection of toolbar buttons (called program commands) appear arranged in groups of like tools. In Microsoft Word, for example, the Home tab includes groups called fonts, paragraph, styles, editing and clipboard. None of the tabs matches any of the old menus and the only trace of the old applications is in the buttons and the dialogs that appear when you click a dialog launcher.

There is no File menu, and to open or save a file you click the Office button — a colourful button in the top left corner of the screen. Adjacent to this is a Quick Access Toolbar, which is the only toolbar you can customize. By default, it contains a small handful of program commands, but you can add anything else you like to it, so it's just the place to put the commands you use every day and that you want to have accessible.

Gone too are the old Alt key commands. So, although Alt + F, S still saves a file, it isn't the new series of keystrokes that you would use. Instead, the new Alt key commands require you to tap the Alt key (not hold it down) and, when you do, each selectable option on the interface displays a key letter or number. Press that and more options appear, if necessary, until your actual command is performed. So, to bold type some text you press Alt, then press

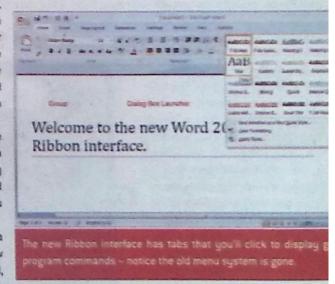
H for the Home tab and then 1 for Bold. Your old Control shortd continue to work – so bold can be applied using Control + B.

New features in the suite include more colourful charts and Sn which helps you create vividly coloured and very interesting be graphics. Applying a Style or a Theme is now an interactive process, your mouse over a Style, for example, and the selected text in the dochanges so you can preview how that style will look if applied to the is not, however, actually applied unless you select it.

Microsoft Outlook is rearranged with a new main screen that has you List, a small calendar and today's appointments, and your email. This puts all the information you need in the one place and saves you to switch to the Calendar or the To Do List to see what you have to co

All the applications that have the new interface also have detai information to assist you to learn your way around. Buried in system of Word, Excel and PowerPoint is a link to an online application shows the old 2003 version application interface. Use this to find way to perform a task when you can't find it in the new interface. Sim on a command on the mock up of Microsoft Word 2003, for example help feature shows you where to find the command in the new I Word 2007 interface or it explains if this feature is no longer availabt find some features, such as PowerPoint's broadcast and presentat taking options, are no longer available.

If you're working with others, be aware that the new Microson document formats are not backwardly compatible with earlier While you can read and write files that have been created in older of, for example, Word, Excel and PowerPoint, users of Word 2003 we able to open and read files created in Microsoft Word 2007 that are Word's new *.docx XML document format. If you're working with per use older versions of Word, either save your documents in the olde or encourage them to download the free Microsoft Office Compatibit for Word, Excel and PowerPoint 2007 File Formats http://tinyurl.com/y5a879, which will let them open the new formal



PMA: the show for all things photographic

If you are into photography, you've probably heard of PMA. Those three letters stand for the Photo Marketing Association, but just as often it's the shorthand reference to the annual convention and trade show that the association hosts

Switching every two years between the host cities of Las Vegas, Nev. (this. year's venue) and Orlando, Fla., PMA attracts 'em all. Professional photographers gather here to meet and compare notes. Specialized groups have conferences within the main conference. There are always exhibits of work from some of the world's best photographers. And, of course, big and small manufacturers alike showcase their latest products at the trade show. Following is a small sample of the many products showcased at the show.

Canon updates flagship EOS-1D Mark III

Canon is celebrating the 20th Anniversary of the EOS SLR brand this year and to mark that milestone it announced what it claims is "the fastest, most powerful digital SLR in the world." No small claim, but the EDS-1D Mark III can churn out images at an impressive 10 frames per second to a maximum of 110 jpeg shots in a single burst.

The Mark III uses a 10.1 megapixel CMOS sensor, which is about the same size as an APS-H film frame and creates a focal length conversion factor of approximately 1.3 (100 mm lens gives the same angle of view as a 130 mm on a full-frame 35 mm camera).

The camera uses a Canon-developed sensor cleaning system, and also incorporates a LCD live view mode (and has a generous three-inch LCD screen), a feature seen previously only on Olympus and Panasonic SLRs. The camera also uses dual image processors. Canon says it has made the Mark III body lighter but more rugged and weather resistant. Price is approximately \$5,500.

New SLRs from Olympus

Olympus announced three new digital SLR cameras - or was it just two? The company focused on its E410 and E510 cameras although also included a teaser (with no details) about the Pro model coming later in the year.

The two new E's are separate designs although they share some core technologies, such as Olympus's pioneering sensor dust removal system

the two cameras is the 10 megapixel image sensor with Live-View, which is the ability to see a real-time image display on the LCD screen. Why Live View is a big deal is because the basic design of the SLR puts a mirror assembly in front of the sensor, which prevents live viewing unless you implement some clever engineering - and Olympus has done that.

One of the notable features that distinguishes the E-510 from the entry-level E-410 is the inclusion of a gyroscopic image stabilization system built into the sensor assembly. This means users can get the benefits of mechanical image stabilization even with non stabilized lenses. The E-410 will be available in May; the E-510 is set to hit shelves in June.

Nikon's baby SLR gains pixels

A lot of manufacturers have introduced compact models in their SLR lineup, including Nikon and its D40, a six megapixel model introduced in November. Joining it this year is the D40x with an impressive 10.2 megapixel sensor. Nikon says this model has a startup time of 0.18 seconds and works with most of its flash units and lenses. Aimed at first-time SLR users, the D40X has several automated scene modes, but also includes the usual advanced exposure modes such as aperture-priority, shutter-priority and full manual. It will be sold with a DX Nikkor 18-55mm zoom lens for a suggested retail price of \$999.95

New digicam line bears GE label

If your company name is unknown, one way to gain instant visibility is to latch onto a brand with huge recognition - one like General Electric. That's precisely what Torrance, Calif.-based General Imaging has done, licensing the famous GE brand for use on its line of eight digital cameras.

The GE branded cameras will cover a broad range of niches, from the budget-priced A series to the advanced X1, an eight megapixel model with 12 x zoom lens, image stabilization and a few other advanced features. In between are the compact G line and the E series. The E850 includes a 5x zoom and 28 mm wide angle performance. The company also announced the P1 snapshot printer.

Pet eye fixer from HP

Hewlett-Packard says pets are the second most frequently photographed subject. To alleviate the glowing eyes syndrome threatening to ruin all those pet photos, its 7.2 megapixel HP Photosmart R837 digital camera has a builtin pet eye fix feature. The camera also has several in-camera editing features such red-eye reduction, blemish and wrinkle smoothing and panorama stitching.

The R837 will be available this month and has a suggested retail price of \$249.99

Epson shows \$500 Super-B inkjet

For photographic printmaking aficionados Epson's line of pigment-based and an image-processing engine it calls TruPic III. Another feature shared by inkjet printers has had the right stuff for several years. Now, Epson has



introduced the Stylus Photo 1400 (replacing the 1280), which uses dye-based inks, not pigments.

The printer will accept media up to 13 inches wide, making it a natural for Super B (13 x 19 inch) printmaking. One of the advantages of pigments is their 100+ year permanence and fade resistance. However, dye formulations have improved and the 1400's Claria inks are rated at up to 98 years under glass or 200 years stored in an album.

The six-colour printer also includes a CD carrier, which allows you to print information directly on the CD — no need for stick on

labels. Suggested retail price is \$499.

Photoshop CS3E joins CS3

The next version of Adobe Photoshop will have two variations. Photoshop CS3 has a stable mate called CS3 Extended. CS3E includes the full CS3 feature set, but adds a few new tools for 3-D and motion graphics, says Adobe. The products should be out later this spring. Earlier this year in a somewhat unusual move, Adobe made a beta version of CS3 available to anyone that had a CS2 license.

Kodak introduces creativity software

Kodak's Easyshare Custom Creations Software is a design package you can use on your home computer to create books, calendars, photo specialty items, etc. Once finished you burn your creations onto a CD,

take it to a participating retailer where your file is turned into your own custom product.

The company also introduced a couple of digital cameras. The EasyShare Z712 IS is a 7.1 megapixel camera with a 12X optical zoom lens and optical image stabilization. The Z885 is an 8.1 megapixel camera with a 5X zoom lens. A noteworthy feature of this model is its high-ISO performance of up to ISO 8000.

By David Tanaka



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Jade Empire: Special Edition

Publisher: 2K Developer: BioWare

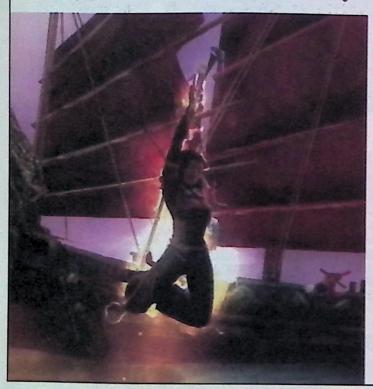
ESRB: Mature Rating: 4/5

Platform: Windows PC (Running on a Windows XP box with a 3.0 GHz Intel Dual Core processor, 268 of Dual Channel DDR RAM running at 800MHz, and a 512MB ATI Radeon X1900 XT graphics card; displayed at 1920x1200 on a Dell 2407FPW 24-inch LCD)

BioWare co-founder Greg Zeschuk once told me that, sometime circa 1995, he walked up to partner Ray Muzyka and said, quite out of the blue: "Let's make a kung fu role-playing game."

It was clearly a terrific idea, but it would take more than a decade for the Edmonton-based game studio to see it through. It took seven years to get to work on it (during which time they were crafting games like Neverwinter Nights, Baldur's Gate, and Star Wars: Knights of the Old Republic), three more to develop and ship it for the original Xbox, and then two on top of that for it to meander on over to the PC. But the wait has been worth it.

Assuming you have at least a passing interest in martial arts movies, you'll



likely recognize many of the fighting styles. BioWare's team modeled the game's combat choreography after their favourite kung fu film heroes, from Jackie Chan to Bruce Lee, and gave the techniques fitting, semi-familiar names, like Thousand Cuts, Legendary Strike and Leaping Tiger (a pair of new techniques, Viper and Iron Palm, have been added to the PC version).

Regardless of the styles you choose to master, the fighting is simple to learn and spectacular to watch. Just lock onto an enemy and click the mouse buttons to perform weak and strong attacks. There's a little more to it than that—you can carry out harmonic combos by combining styles and you can use something called Focus to slow down time—but the learning curve is nonetheless impressively shallow. It's a refreshingly accessible play, especially for a role-playing game.

As Jade Empire progresses, there are two overarching philosophies that your character can follow: The Way of the Open Palm and The Way of the Closed Fist. The former is practiced by altruists, the latter by less scrupulous characters. The game tracks which path your character is following by monitoring the responses you make during conversations, and the game has the potential to play out differently based on the decisions you make.

Jade Empire's sole weak link is character growth. Unlike traditional roleplaying games, players aren't provided any real inventory to speak of or items to collect. Nor is there much to do when your character levels up. We occasionally get to swap old weapons for better ones, and we can distribute a few points to basic skills as the game moves forward, but that's about it.

That means it's left to the narrative to deliver a sense of progress to the game. And it does, thanks to hours of Hollywood-quality voice acting, clever dialogue and a compelling plot concerning a corrupt regime that includes tragedy, humour and even a bit of believable romance. Indeed, if all games turned in scripts and performances even half as polished as what we've been given in Jade Empire, the perception of games as inartistic time wasters devoid of storytelling merit might soon fade.

When it comes down to it, the only real reason for action game lovers and RPG fans not to give Jade Empire: Special Edition a go is if they've already played it on an Xbox. There are a couple of new fighting styles and characters exclusive to the PC version, and the graphics have been spruced up considerably, but those improvements alone don't make it worth shelling out another \$60. If, on the other hand, you've been patiently waiting for the PC version, you're in for a treat.

By Chad Sapieha

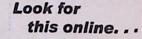


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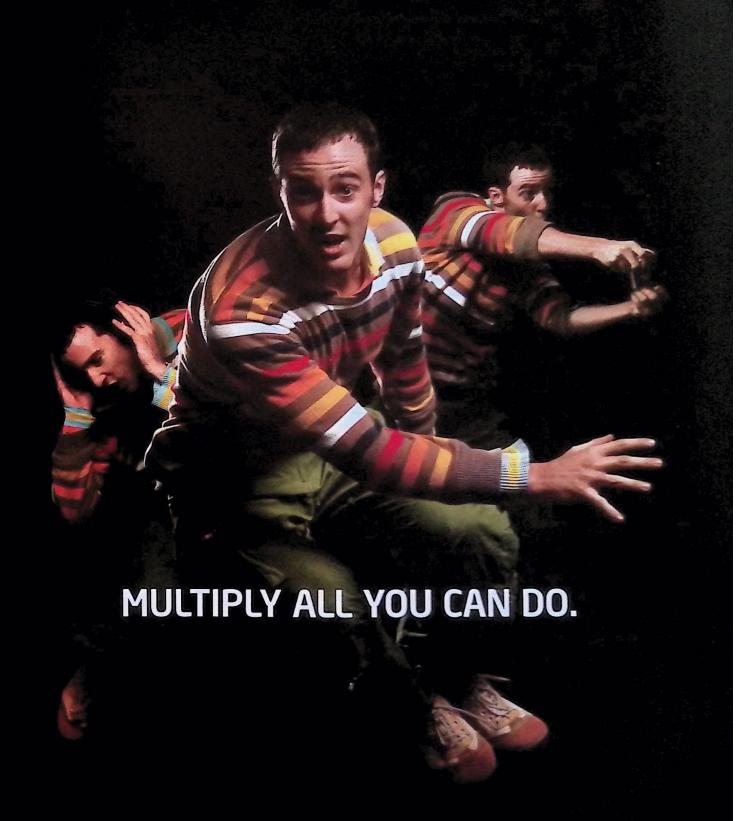
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2. SHOULD HAVE INVESTED A NICE COST

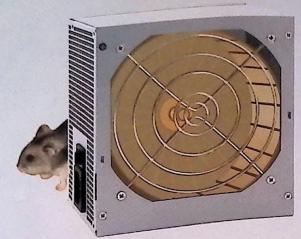
2. SHOULD HAVE INVESTED IN THE HOUSE BY THE LAKE INSTEAD OF THE STREET.

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